

WHAT IS CLAIMED IS:

- Sub
B6
Att 7
- 5
1. A system for remote configuration of a transaction processing device, comprising:
 - a transaction processing device for providing a network service; and
 - a remote configuration server, wherein said configuration server is capable of communicating securely with said transaction processing device via a public communications network, wherein said transaction processing device is capable of communicating securely with said configuration server via said public network, and wherein said transaction processing device is capable of being remotely configured by said configuration server via said public communications network.
 2. The system of claim 1, wherein said transaction processing device comprises:
 - a first cryptographic services module for providing secure communication of information from said transaction processing device to said configuration server via said public communications network.
 3. The system of claim 2, wherein said remote configuration server comprises:
 - a second cryptographic services module for providing secure communication of information from said configuration server to said transaction processing device via said public network.
 4. The system of claim 3, wherein said transaction processing device further comprises:
 - a first communications protocol stack to facilitate communication over said communications network.
 5. The system of claim 1, wherein said transaction processing device communicates securely over said public network without utilizing a host processor based system that is external to said device.

6. The system of claim 4, wherein said communications protocol stack is a TCP/IP stack.
7. The system of claim 4, wherein said configuration server comprises:
a configuration module, wherein said second cryptographic services module is part of said configuration module.
8. The system of claim 4, wherein said configuration server comprises:
a second communications protocol stack to facilitate communication with said transaction processing device over said communications network.
9. The system of claim 8, further comprising:
a certificate manager communicatively connected to said transaction processing device, wherein said certificate manager issues a terminal certificate to said transaction processing device.
10. The system of claim 9, wherein said certificate manager issues a server certificate to said configuration server.
11. The system of claim 9, wherein said terminal certificate is stored in said first cryptographic services module.
12. The system of claim 10, wherein said server certificate is stored in said second cryptographic services module.
13. The system of claim 11, wherein said terminal certificate is stored in said second cryptographic services module.

14. The system of claim 12, wherein said server certificate is stored in said first cryptographic services module.

15. The system of claim 11, wherein said first cryptographic services module further comprises at least one cryptographic algorithm for encrypting information transmitted from said transaction processing device to said configuration server.

16. The system of claim 12, wherein said second cryptographic services module further comprises at least one cryptographic algorithm for encrypting information transmitted from said configuration server to said transaction processing device.

17. The system of claim 9, wherein said certificate manager is part of said configuration server.

18. The system of claim 9, wherein said configuration server further comprises:
a security services module, wherein said security services module extracts a public key of said transaction processing device from said certificate of said transaction processing device to authenticate said transaction processing device.

19. The system of claim 18, wherein said cryptography services module signs a hash of configuration data about said transaction processing device retrieved from a database services module of said configuration server with a private key of the configuration server.

20. The system of claim 19, wherein said signed configuration data is encrypted with said extracted public key of said transaction processing device and transmitted to said transaction processing device over said public communications network.

21. The system of claim 19, wherein said signed configuration data is transmitted to said transaction processing device over said public communications network.

24. A method for remotely providing updated configuration information related to a subscriber account to one or more transaction processing devices from a remote server, comprising the steps of:

allowing a subscriber to access a configuration web site of a provider of said subscriber account;

allowing said subscriber to select at least one transaction processing device associated with said subscriber account to be provided with configuration information;

receiving updated configuration information about said selected transaction processing device;

receiving authorization to provide said updated configuration information to said selected transaction processing device; and

remotely providing said updated configuration information to said selected transaction processing device.

25. The method of claim 24, wherein said allowing access step comprises the step of:

verifying a username and a password of said subscriber to authenticate said subscriber.

26. The method of claim 25, wherein said allowing selection step comprises the steps of:

presenting said subscriber with a list of one or more transaction processing devices associated with said subscriber account; and

allowing said subscriber to select at least one transaction processing device from said list of transaction processing devices.

27. The method of claim 26, further comprising:

presenting said subscriber with stored configuration information about said selected transaction processing devices.

28. The method of claim 27, wherein said receiving updated configuration information step comprises the step of:

allowing said subscriber to select one or more items from a list of items.

29. The method of claim 28, wherein said list of items includes a list of a plurality of services and a list of a plurality of software modules.

30. The method of claim 27, wherein said receiving updated configuration information step comprises the step of:

allowing said subscriber to directly update configuration information by adding additional information about said subscriber.

31. The method of claim 27, wherein said receiving updated configuration information step comprises the step of:

allowing said subscriber to directly update configuration information by changing existing information.

32. The method of claim 24, wherein said updated configuration information includes information selected from the group consisting of said subscriber's logo, said subscriber's business name, said subscriber's address, said subscriber's telephone number, said subscriber's Uniform Resource Locator, said subscriber's fax number, said subscriber's email address and said selected transaction processing device's moniker.

33. The method of claim 27, wherein said receiving authorization step further comprises the steps of:

allowing said subscriber to confirm said selected transaction processing devices to be provided with configuration information.

35. A method for remotely configuring a transaction processing device,
comprising the steps of:
 authenticating said transaction processing device by a configuration server;
 authenticating said configuration server to said transaction processing device, if said
5 configuration server includes configuration data about said transaction processing device;
 providing said configuration data to said transaction processing device by said
configuration server;
 storing said provided configuration data by said transaction processing device;
 receiving by said configuration server an acknowledgment from said transaction
10 processing device; and
 storing said received information including said configuration data by said
configuration server.

36. The method of claim 35, wherein said authenticating said transaction
processing device step comprises the steps of:
 initiating a connection with a communication network by said transaction processing
device;
5 encrypting an identifying token by said transaction processing device utilizing a
private key of said transaction processing device;
 transmitting said encrypted identifying token via said communication network to said
configuration server; and
 decrypting said received identifying token by said configuration server utilizing a
10 public key of said transaction processing device.

37. The method of claim 36, wherein said authenticating said configuration server step comprises the steps of:

encrypting an identifying number of said configuration server by said configuration server utilizing a private key of said configuration server;

5 transmitting said encrypted identifying number via said communication network to said transaction processing device; and

decrypting said received identifying number by said transaction processing device utilizing a public key of said configuration server.

38. The method of claim 37, wherein said step of providing configuration data comprises the steps of:

encrypting at least a portion of said configuration data by said configuration server;

and

5 transmitting said encrypted configuration data to said transaction processing device.

39. The method of claim 38, wherein said step of storing said provided configuration data further comprises the steps of:

verifying by said transaction processing device that it is the intended recipient of said received encrypted configuration information; and

5 verifying by said transaction processing device that the received encrypted information was sent by said configuration server.

40. The method of claim 35, wherein said transaction processing device is a point-of-sale terminal.

